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WANG, Liping [CN/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US). WEBER, Ann, E. [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US).

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(74) Common Representative: **MERCK & CO., INC.**; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US).

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(71) Applicant (*for all designated States except US*): **MERCK & CO., INC.** [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US).

(72) Inventors; and

Published:

(75) Inventors/Applicants (*for US only*): **DUFFY, Joseph, L.** [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US). **EDMONDSON, Scott, D.** [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US). **KIM, Dooseop** [KR/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US). **KIRK, Brian, A.** [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US).

— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: 3-AMINO-4-PHENYLBUTANOIC ACID DERIVATIVES AS DIPEPTIDYL PEPTIDASE INHIBITORS FOR THE TREATMENT OR PREVENTION OF DIABETES

(57) Abstract: The present invention is directed to 3-amino-4-phenylbutanoic acid derivatives which are inhibitors of the dipeptidyl peptidase-IV enzyme ("DP-IV inhibitors") and which are useful in the treatment or prevention of diseases in which the dipeptidyl peptidase-IV enzyme is involved, such as diabetes and particularly type 2 diabetes. The invention is also directed to pharmaceutical compositions comprising these compounds and the use of these compounds and compositions in the prevention or treatment of such diseases in which the dipeptidyl peptidase-IV enzyme is involved.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/40114

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 31/497; C07D 403/00
US CL : 514/254.05, 254.06; 544/366, 370

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 514/254.05, 254.06; 544/366, 370

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	ASHWORTH et al. 4-CYANTHIAZOLIDIDES AS VERY POTENT, STABLE INHIBITORS OF DIPEPTIDYL PEPTIDASE IV." Bioorganic and Medicinal Chemistry Letters. 19 November 1996, Vol. 6, No. 22, pages 2745-2748, the whole document.	1-33

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "B" earlier application or patent published on or after the international filing date
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- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

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Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703)872-9306

Authorized officer

Zachary C. Tucker
Telephone No. (571) 272-1600

INTERNATIONAL SEARCH REPORT

PCT/US03/40114

Continuation of B. FIELDS SEARCHED Item 3:

STN- "registry" file, structure search

EAST- "USPAT," "EPO," "JPO," "Derwent" search terms: piperazine, dipeptidyl peptidase IV, diabetes